

METHOD AND DEVICE FOR ELECTRONIC IMAGE CAPTURE IN SEVERAL ZONES

Abstract of Disclosure

The invention relates to electronic image capture by an image sensor (CPT) divided into several zones (ZD, ZG) in particular so as to allow real-time reading (30 images/second) of images with high resolution and with a wide dynamic range of luminances. To compensate for the inevitable differences between processing pathways arising from the various zones, there is provided a digital correction table (TC) inserted into one of the processing pathways. This table matches each level b_i of image signal with a corrected level b'_i compensating for the difference with the other processing pathway for this signal level. According to the invention, the content of the table is updated dynamically on the basis of observation of the actual images viewed by the sensor. The correction is based on the fact that the transitions in the image should be regular and that an abrupt transition at the border is a mark of insufficient correction. A convergent algorithm is described, making it possible to correct the whole table on the basis of the observation of two border points, then to redo corrections on the whole table on the basis of the analysis of other border points of the same image or of subsequent images. The correction is made in small steps so as to end up with a stable correction table after a certain number of iterations of the algorithm.

Figures